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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/804,561

03/19/2004

William A. Groll

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EXAMINER

FLETCHER III, WILLIAM P

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

03/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/804,561	Applicant(s) GROLL, WILLIAM A.	
	Examiner William P. Fletcher III	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 6, 2008, has been entered.

Response to Amendment

2. Claims 11-17 remain pending.

Response to Arguments

3. Applicant's arguments, see the remarks, filed March 6, 2008, with respect to the rejections under 35 USC 112, 1st and 2nd, set forth in items 7-10 of the prior Office action, have been fully considered and are persuasive. Applicant has deleted the terms "high temperature spraying" and "sharp," thereby obviating the rejections. These rejections have been withdrawn.

4. Applicant's arguments, see the remarks, filed March 6, 2008, with respect to the rejection(s) of claim(s) 11-17 under 35 USC 103(a), set forth in items 11 and 12 of the prior Office action, have been fully considered and are persuasive. None of the cited references teaches or suggests smoothing, buffing, etc., of the deposited, impregnated metal-ceramic layer. Therefore, the rejection has been withdrawn. However, upon

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further consideration, a new ground(s) of rejection is made in view of Wolf (US 3,271,653 A), see below.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf (US 3,271,653 A) in view of Becker (US 4,204,021 A).**

A. Claim 11

i. Wolf teaches every element of the claimed process for making cookware having a non-stick surface recited in this claim *except* that the layer applied in step (c) is, specifically, a metal-ceramic [title; 1:63-2:3; and 3:14-65]. In particular, it is the Examiner's position that 3:52-65 reads on step (f).

ii. With respect to the material applied in step (c), Wolf teaches that it may be "any material providing a permanent porous layer" [3:26-27].

iii. As noted in prior Office actions, Becker teaches a process for making cookware having a non-stick surface in which a porous layer of metal-ceramic is vacuum impregnated with a release agent [3:36 ff., for example].

iv. The teaching of Wolf, that any suitable material may be used to form the porous layer, when taken together with the teaching of Becker, that a metal-ceramic is a material suitable for such a purpose, would have suggested to one skilled in the art that it would have been obvious to utilize, as the porous layer forming material, a metal-ceramic, motivated by the expectation of similar results: the formation of a permanent porous layer that may be impregnated with release agent.

B. Claim 12

i. As noted in prior Office actions, Becker teaches the compounds recited in this claim.

ii. Consequently, it would have been further obvious to utilize as the metal-ceramic material, the materials recited in this claim, motivated by the expectation of similar results: the formation of a permanent porous layer that may be impregnated with release agent.

C. Claim 13

i. Wolf teaches application of the porous layer to a thickness of between 0.002 in. and 0.015 in. [3:28-33].

ii. It is the Examiner's position that the metal-ceramic materials taught by Becker are capable of forming layers having thicknesses within this range and there thus exists a reasonable expectation of success, absent evidence to the contrary.

D. Claim 14

i. As noted above, Wolf teaches application of the porous layer to a thickness of between 0.002 in. and 0.015 in., which encompasses the claimed thickness of 0.004 in. In the case where the claimed ranges or values overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists. See MPEP 2144.05(I).

ii. While Wolf teaches a porosity of from 10% to 60% [3:36-37] and Becker teaches a porosity of from about 15% to about 55% [4:4], neither reference expressly teaches the claimed 7% porosity. Nevertheless, as noted in the prior Office action, it is the Examiner's position that the porosity of the film is a result-effective variable affecting the continuity, strength, and cohesion of the film, and it would have been obvious to optimize this variable by routine experimentation, absent evidence of unexpected results. See MPEP 2144.05(II).

E. Claim 15

i. While Wolf teaches that the liquid release agent may be a silicone resin [4:35] and that the material may be cured by "submission to the necessary temperature for the required time [4:45 ff.], the reference does not expressly teach the claimed curing temperature.

ii. As noted in prior Office actions, Becker also teaches silicon resin impregnating agents, curable at these temperatures. Consequently, it would have been obvious to one skilled in the art to modify Wolf so as to utilize, as the silicone resin, the silicone resin of Becker, curable at the

claimed temperature. One of ordinary skill would have been motivated to do so by the desire and expectation of similar results: the impregnation and curing of a suitable release material to yield a non-stick surface.

F. Claim 16

i. It is the Examiner's position that the buffing taught by Wolf reads on the claimed "mechanical polishing" [3:55].

ii. While Wolf does not teach the claimed end roughness of 10 ra, it is the Examiner's position that to maximize the non-stick properties of a non-stick surface, it would have been obvious to one skilled in the art to minimize the surface roughness. Since the claimed range of *less than* 10 ra reads on minimization of the surface roughness, this limitation is rendered obvious, absent evidence to the contrary.

G. Claim 17

i. As noted above, Wolf teaches application of the porous layer to a thickness of between 0.002 in. and 0.015 in., which encompasses the claimed thickness of 0.004 in. In the case where the claimed ranges or values overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists. See MPEP 2144.05(I).

ii. While Wolf teaches a porosity of from 10% to 60% [3:36-37] and Becker teaches a porosity of from about 15% to about 55% [4:4], neither reference expressly teaches the claimed 7% porosity. Nevertheless, as noted in the prior Office action, it is the Examiner's position that the

porosity of the film is a result-effective variable affecting the continuity, strength, and cohesion of the film, and it would have been obvious to optimize this variable by routine experimentation, absent evidence of unexpected results. See MPEP 2144.05(II).

iii. Finally, as noted in the prior Office action, it is the Examiner's position that chromium oxide is a known non-stick material and would have been an obvious expedient to one of ordinary skill in the art.

Conclusion

7. The prompt development of clear issues in the prosecution history requires that applicant's reply to this Office action be fully responsive (MPEP § 714.02). When filing an amendment, applicant should specifically point out the support for any amendment made to the disclosure, including new or amended claims (MPEP §§ 714.02 & 2163). A fully responsive reply to this Office action, if it includes new or amended claims, must therefore include an explicit citation (i.e., page number and line number) of that/those portion(s) of the original disclosure which applicant contends support(s) the new or amended limitation(s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Sunday, 5:00 AM - 12:00 PM and Monday through Friday, 5:00 AM - 3:30 PM; on campus every Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William Phillip Fletcher III/

Primary Examiner

March 15, 2008